

CLAIM(S)

What is claimed is:

1. A combination appliance for cooling and cooking a food item, comprising:
a frame including a cooking chamber and a refrigeration module chamber,
5 wherein the cooking chamber has a first access opening through which access to the interior of the cooking chamber is provided;
a door moveably mounted to the frame for movement between an open position wherein the first access opening is uncovered and a closed position where the first access opening is covered;
10 a heat element disposed within the cooking chamber to selectively provide heat to the cooking chamber;
an inlet duct extending between the refrigeration module chamber and the cooking chamber, the inlet duct having an inlet in communication with the refrigeration module chamber and an outlet in communication with the cooking chamber;
15 a return duct extending between the refrigeration module chamber and the cooking chamber, the return duct having an inlet in communication with the cooking chamber and an outlet in communication with the refrigeration module chamber;
a refrigeration module including a compressor, condenser, evaporator, and base on which the compressor, condenser, and evaporator are mounted to form a module; and
20 an insulated housing overlying the evaporator to thermally isolate the evaporator from the condenser, the insulated housing having an inlet and an outlet, which align with the outlet of the return duct and the inlet of the inlet duct, respectively, when the refrigeration module is mounted within the refrigeration module chamber, to thereby form a refrigerated air path between the evaporator and the cooking chamber.
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2. The combination appliance of claim 1 wherein the heat element is at least one of the group consisting of an electrical resistance heating element and a gas burner.

3. The combination appliance of claim 2 further comprising:
a first means adapted for controlling the operation of the heating element and the refrigeration module,
a second means adapted for sending and receiving data concerning the heating
5 element and the refrigeration module to and from a remote location via at least one of the
groups consisting of a public exchange computer communications system, a public switched
telephone network and an internet;
whereby an individual may evaluate said data concerning the heating element and the
refrigeration module received through said second means thus enabling said individual to
10 direct and control the first means through the second means.

4. The combination appliance of claim 3 wherein the second means of actuating
the first means from a remote location include software run by a home server capable of being
able to communicate by using communication interface protocol via network media.

15 5. The combination appliance of claim 4 wherein the communication is through a
network medium.

6. The combination appliance of claim 4 wherein the communication is through
20 an intranet.

7. The combination appliance of claim 1 wherein the heat element is located at
the bottom of the cooking chamber, further comprising a second heat element at the top of the
cooking chamber.

25 8. A combination appliance for freezing and cooking a food item, comprising:
a frame including a cooking chamber and a freezer module chamber, wherein
the cooking chamber has a first access opening through which access to the interior of the

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cooking chamber is provided;

a door moveably mounted to the frame for movement between an open position wherein the first access opening is uncovered and a closed position where the first access opening is covered;

5 a heat element disposed within the cooking chamber to selectively provide heat to the cooking chamber;

an inlet duct extending between the freezer module chamber and the cooking chamber, the inlet duct having an inlet in communication with the freezer module chamber and an outlet in communication with the cooking chamber;

10 a return duct extending between the freezer module chamber and the cooking chamber, the return duct having an inlet in communication with the cooking chamber and an outlet in communication with the freezer module chamber;

a freezer module including a compressor, condenser, evaporator, and base on which the compressor, condenser, and evaporator are mounted to form a module; and

15 an insulated housing overlying the evaporator to thermally isolate the evaporator from the condenser, the insulated housing having an inlet and an outlet, which align with the outlet of the return duct and the inlet of the inlet duct, respectively, when the freezer module is mounted within the freezer module chamber, to thereby form a refrigerated air path between the evaporator and the cooking chamber.

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9. The combination appliance of claim 8 wherein the heat element is at least one of the group consisting of an electrical resistance heating element and a gas burner.

10. The combination appliance of claim 8 further comprising:

25 a first means adapted for controlling the operation of the heating element and the freezer module;

a second means adapted for sending and receiving data concerning the heating element and the freezer element to and from a remote location via at least one of the groups

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consisting of a public exchange computer communications system, a public switched telephone network and Internet;

whereby an individual may evaluate said data concerning heating element and freezer module received through the second means thus enabling the individual to direct and control
5 the first means through the second means.

11. The combination appliance of claim 10 wherein the second means of actuating the first means from a remote location include software run by a home server capable of being able to communicate by using communication interface protocol via network media.

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12. The combination appliance of claim 11 wherein the communication is through a communication media interface.

13. The combination appliance of claim 11 wherein the communication is through
15 an intranet.

14. The combination appliance of claim 8 wherein the heat element is located at the bottom of the cooking chamber, further comprising a second heat element at the top of the cooking chamber.

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15. A time-bake cooking cycle for a refrigerated oven used to cook a food item therein, the refrigerated oven comprising a cooking chamber selectively closeable by a door, a heating element for heating the cooking chamber, a refrigeration unit for cooling the cooking chamber, a temperature sensor for sensing the temperature of the cooking chamber, a data
25 input device for inputting user-selected cooking cycle parameters, and a controller operably coupling the heating element, refrigeration unit, temperature sensor, and the data input device to selectively actuate the heating element and the refrigeration unit in response to the sensed temperature to implement the cooking cycle as defined by the cooking cycle parameters, the

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time-bake cooking cycle comprising:

a cool cycle wherein the temperature of the cooking chamber is maintained at a first predetermined temperature to prevent spoilage of the food item in the cooking chamber;

a bake cycle following the cool cycle wherein the temperature of the cooking chamber
5 is maintained at a temperature to cook the food item in the cooking chamber; and

a warm cycle following the bake cycle wherein the temperature of the cooking chamber is maintained at a temperature suitable for serving the food item upon removal from the cooking chamber.

10 16. The time-bake cooking cycle of claim 15 wherein the heat element is at least one of the group consisting of an electrical resistance heating element and a gas burner.

17. The time-bake cooking cycle of claim 15 wherein the data input device further comprises:

15 a first means adapted for controlling the operation of the heating element and the refrigeration unit;

a second means adapted for sending and receiving data concerning the heating element and the refrigeration unit to and from a remote location via at least one of the groups consisting of a public exchange computer communications system, a public switched
20 telephone network and Internet;

whereby an individual may evaluate said data concerning the heating element and the refrigeration unit received through the second means thus enabling the individual to direct and control the first means through the second means.

25 18. The time-bake cooking cycle of claim 17 wherein the second means of actuating the first means from a remote location include software run by a home server capable of being able to communicate by using communication interface protocol via network media.

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19. The time-bake cooking cycle of claim 17 wherein the communication is through a network medium.

5 20. The time bake cooking cycle of claim 17 wherein the communication is through an intranet.

21. The time-bake cooking cycle according to claim 15 and further comprising a second cool cycle initiated after the warm cycle.

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22. The time-bake cooking cycle according to claim 15 and further comprising a data input cycle prior to the cool cycle wherein user-defined operating parameters are stored in the controller.

15 23. The time-bake cooking cycle according to claim 22 wherein the user-defined operating parameters comprise an End Time representing the time of day that the cooking of the food is to be completed and a Bake Time representing the length of time to cook the food.

24. The time-bake cooking cycle according to claim 22 wherein the bake cycle is initiated at the time of day corresponding to the End Time minus the Bake Time.

25. A time-bake cooking cycle for a freezer oven used to cook a food item therein, the freezer oven comprising a cooking chamber selectively closeable by a door, a heating element for heating the cooking chamber, a freezing unit for freezing the cooking chamber, a temperature sensor for sensing the temperature of the cooking chamber, a data input device for inputting user-selected cooking cycle parameters, and a controller operably coupling the heating element, freezer unit, temperature sensor, and the data input device to selectively actuate the heating element and the freezer unit in response to the sensed temperature to

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implement the cooking cycle as defined by the cooking cycle parameters, the time-bake cooking cycle comprising:

a freeze cycle wherein the temperature of the cooking chamber is maintained at a first predetermined temperature to prevent spoilage of the food item in the cooking chamber;

5 a bake cycle following the freeze cycle wherein the temperature of the cooking chamber is maintained at a temperature to cook the food item in the cooking chamber; and

a warm cycle following the bake cycle wherein the temperature of the cooking chamber is maintained at a temperature suitable for serving the food item upon removal from the cooking chamber.

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26. The time-bake cooking cycle of claim 25 wherein the heat element is at least one of the group consisting of an electrical resistance heating element and a gas burner.

27. The time-bake cooking cycle of claim 25 wherein the data input device further
15 comprises:

a first means adapted for controlling the operation of the heating element and the freezer unit;

a second means adapted for sending and receiving data concerning the heating element and the freezer unit to and from a remote location via at least one of the groups
20 consisting of a public exchange computer communications system, a public switched telephone network and Internet;

whereby an individual may evaluate said data concerning the heating element and the freezer unit received through the second means thus enabling the individual to direct and control the first means through the second means.

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28. The time-bake cooking cycle of claim 27 wherein the second means of actuating the first means from a remote location include software run by a home server capable of being able to communicate by using communication interface protocol via network

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media.

29. The time-bake cooking cycle of claim 27 wherein the communication is through a network medium.

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30. The time bake cooking cycle of claim 27 wherein the communication is through an intranet.

31. The time-bake cooking cycle according to claim 25 and further comprising a data input cycle prior to the freeze cycle wherein user-defined operating parameters are stored in the controller.

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32. The time-bake cooking cycle according to claim 25 and further comprising a cool cycle following the warm cycle.

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33. The time-bake cooking cycle according to claim 25 and further comprising a cool cycle following the bake cycle.

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34. The time-bake cooking cycle according to claim 31 wherein the user-defined operating parameters comprise an End Time representing the time of day that the cooking of the food is to be completed and a Bake Time representing the length of time to cook the food.

35. The time-bake cooking cycle according to claim 31 wherein the bake cycle is initiated at the time of day corresponding to the End Time minus the Bake Time.

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